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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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September 30, 1985

CERTIFIED RETURN RECEIPT REQUESTED
(P592-429-559)

Mr. Andy King
Genwal Coal Company, Inc.
P. O. Box 1201
Huntington, Utah 84528

Dear Mr. King:

Re: Abatement Plans for Notice of Violation N85-4-5-2, 2 of 2, N85-4-12-3, 1 of 3, N85-4-12-3, 3 of 3, Crandall Canyon Mine, ACT/015/032, #3, 7, Emery County, Utah

The Division has reviewed Genwal Coal Company's submittal of August 5, 1985 concerning the abatement of N85-4-5-2, 2 of 2, N85-4-12-3, 1 of 3, N85-4-12-3, 3 of 3. The submittal was determined to be deficient and incomplete. The following concerns and deficiencies must be adequately addressed before the review can be determined complete and approval granted for abatement of the outstanding violations.

1) The use of a curve number of 51 in the hydrologic designs has been determined to be inappropriate using information supplied in the original MRP. Percent cover information given on pages 26, table 3-D, p. 29, table 3-E, and p. 32, table 3-F (August 9, 1982 submittal) indicate that the use of 63 percent cover is incorrect. Using Plate 9-1, the Division divided the area into six vegetation types and computed a weighted CN of 70 (69.3 actual) based upon those divisions. The details of this calculation are available for your use from the Division. Additionally, the Forest Hydrologist for the Manti-LaSal National Forest has proposed a curve number of 65 for Crandall Canyon (G. Dennis Kelly, R-4 Hydrograph, 1985). The operator is requested to submit new designs utilizing this value. The SCS type II distribution should be used for all peak flow calculations.

2) Page 14 states that the new fill for the embankment "should be compacted in place prior to placing the next lift." The application must commit to compacting each lift.

3) Page 14 states a stability investigation was conducted for a proposed pond in 1981 and a static safety factor was determined to be 1.4. The Division requires a static safety factor of 1.5 and a seismic safety factor of 1.1 before a variance to sideslope requirements can be granted. This requirement is especially emphasized due to the environmentally sensitive location of the proposed pond. A new geotechnical analysis of the proposed pond must be conducted and submitted. Analysis must be based on samples from the existing embankment, underlying natural material and the expected fill material. The analysis must assume empty and full pond conditions. A pieziometric line from the water elevation at design depth to the toe of the slope must be assumed for both full and empty pond conditions. Additionally, plans for the size and location of the rock fragments discussed in paragraph 5 must be submitted. The application must contain designs for the stable passage of the 100 year-24 hour peak flow in Crandall Creek at the pond area and all other areas where the disturbed area encroaches in the Crandall Creek channel. These encroachment areas must be clearly identified on a corresponding site facilities map as well.

4) Page 14 states the spillway "should be lined with riprap" as presented in Appendix A. Again, the application must commit to a specific design.

5) The application must contain adequate designs for energy dissipators for all outlets discharging into Crandall Creek.

6) The application contains a discrepancy in designs for the pond embankment elevation. Page 14 states the elevation will be at 7785.2 feet and page 15/22 of the Appendix states the elevation will be 7784.9 feet. Please clarify.

7) Diversion sizing designs must include velocity and capacity calculations for each reach that varies in configuration or slope. Channel capacity designs must be submitted based upon the minimum slope and riprap designs based upon the maximum slope of the diversion.

8) The delineation of the watersheds is unclear as presented on Plate 1. The watersheds must be correlated with the narrative in the text as to the structure receiving the drainage from each watershed. All watersheds and subwatersheds discussed in the text must be clearly depicted and referenced on a map.

9) What is the slope of the proposed 18 inch CMP from the pad to Crandall Creek? Is the nomograph presented in the Appendix applicable to steep slope culverts? Please clarify designs.

10) The operator must place a culvert beneath the pad as proposed and approved under the original MRP submittal. This diversion must be designed to pass the 25 yr-24 hr precipitation event. Energy dissipator designs must be submitted for the outlet into Crandall Creek.

11) Items 2, 5, 6, 7, 8, and 10 of the Division's June 21, 1985 letter to Mr. Andrew C. King have not been addressed. These items must be adequately addressed prior to final approval of this abatement submittal.

The operator's next abatement submittal must reference by number, the specific NOV that the abatement response will address. To date, the submittals have been very difficult to track as the operator has failed to consistently identify which NOV the abatement plan is meant to address.

12) The operator must address comments received from the USFS (letter dated August 6, 1985) which are enclosed. Through phone conversations with Mr. Sam Hotchkiss of the USFS on September 27th, it is our understanding that additional review comments will be forthcoming from them on the latest "Drainage and Sediment Control Plan" (transmitted by Genwal to DOGM on September 3, 1985).

13) The operator must include a specific topsoil management plan for the proposed surface facility site. The operator must remove all topsoil prior to any disturbance to the land surface. It must also be shown that the depth of the topsoil removal will be based on the results of the physical and chemical analysis and the soil survey. Based on field observations by the Division, a minimum of 12 inches of topsoil must be removed. The location of the short term topsoil stockpiling while the new surface facility site is being established must be included. The following items must also be addressed:

a. Contemporaneous reclamation of the proposed surface facility site.

b. The protection of the short term and long term topsoil stockpile from compaction, contaminants, wind and water erosion.

c. The aerial extent, dimensions, slopes, volumes and the shape of the stockpiles must be provided.

d. The location of the long term topsoil stockpile(s) must also be provided and referenced.

14) The revegetation plan submitted as section 3.1.2 of the Earthfax Engineering Inc. report is not acceptable. While it correctly identifies those areas that need to be revegeted in conjunction with the sediment pond, the seed mix and mulching plan must be revised. The temporary seed mix identified on page 2 of the July 29, 1982 Genwal Reclamation and Revegetation Plan Changes is acceptable provided the indicated rate is Pure Live Seed (not bulk seed). Seeding should be done in late fall prior to snowfall (generally mid to late October). The mulching plan on page 4 of the Revised Reclamation and Revegetation Plan (dated June 30, 1982) is acceptable. The operator must commit to using the seed mix and mulching plan identified above or submit an acceptable alternate plan.

The operator must also provide a specific reclamation plan, or make specific reference to any applicable existing plan, for the new site facilities area.

The Division recommends that the operator request a meeting with appropriate representatives from the Division, U.S. Forest Service, and the OSM at the earliest convenient date to discuss the proposed site plans. Proper approvals from the State Department of Health and the Division of Water Rights will likely be required for the final design of the sedimentation pond as well.

The operator must respond to these deficiencies by October 11, 1985 in order for the Division to complete the review of the proposal in a timely fashion. Should questions arise concerning the above, please contact us at your earliest convenience.

Sincerely,

D. Wayne Hedberg

D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

enclosure

RS:jvb
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